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## RESEARCH ARTICLE

## IMPROVEMENT OF CRITICAL THINKING ABILITY THROUGH COOPERATIVE LEARNING MODEL TYPE GROUP INVESTIGATION IN EYES OF SOCIAL SCIENCES IN STUDENT CLASSIC V

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### Abstrak

Penelitian ini bertujuan untuk meningkatkan keterampilan berpikir kritis siswa dalam mata pelajaran ilmu sosial melalui model pembelajaran kooperatif tipe investigasi kelompok. Penelitian ini menggunakan metode penelitian tindakan dengan menggunakan model Kemmis dan Mc.Taggart yang terdiri dari empat tahap yaitu, perencanaan, tindakan, observasi dan refleksi yang dilakukan selama dua siklus. Teknik pengumpulan data menggunakan catatan lapangan, dokumentasi, observasi aktivitas guru dan observasi aktivitas siswa, tes dan non tes. Subjek dalam penelitian ini adalah siswa kelas V SDN Majalengka Kulon I. Hasil penelitian menunjukkan peningkatan keterampilan berpikir kritis. Ini dibuktikan dengan persentase rata-rata siswa dalam siklus tindakan I adalah 69,9%. Aktivitas guru menurut langkah-langkah metode ini mencapai 67,5% dan aktivitas siswa mencapai 65%. Peningkatan pada siklus kedua mencapai 88% aktivitas guru sesuai dengan langkah-langkah metode ini mencapai 90% dan aktivitas siswa mencapai 87,5%. Implikasi dari penelitian ini adalah model pembelajaran kooperatif tipe investigasi kelompok untuk meningkatkan kemampuan berpikir kritis. Dalam tema pengajaran yang kelima, mata pelajaran bangsa sebagai Indonesia. Hasil penelitian ini menunjukkan peningkatan keterampilan berpikir kritis siswa melalui investigasi tipe model pembelajaran kooperatif.

*Kata kunci:* Kemampuan Berpikir Kritis, Model Group Investigation and Action Research.

### Abstract

This study aims to improve students' critical thinking skills in social science subjects in grade V SDN Majalengka Kulon I through cooperative learning model of group investigation type. This research uses action research method using Kemmis and Mc.Taggart model consisting of four stages namely, planning, action, observation and reflection conducted for two cycles. Data collection techniques used field notes, documentation, teacher activity observation and student activity observation, test and non test. The subjects in this study are the students of grade V SDN Majalengka Kulon I. The results showed an increase in critical thinking skills. This is evidenced by the average percentage of students in the action cycle I is 69.9%. Teacher activity according to the steps of this method reaches 67,5% and student activity reach 65%. The increase in the second cycle reached 88% of teacher activity in accordance with the steps of this method reached 90% and student activity reached 87.5%. The implication of this research is cooperative learning model of group investigation type to improve critical thinking ability. In the 5th theme teaching subjects are proud as Indonesia. The results of this study indicate an increase in students' critical thinking skills through cooperative learning model type investigation.

**Keywords:** Critical Thinking Ability, Model Group Investigation and Action Research.

## A. INTRODUCTION

The basic concept of IPS in elementary school (SD) is very useful in the learning process, because students can relate the facts, ideas and events of the material learned that later the students will more easily draw conclusions. [1] Based on the principles of the curriculum of 2013, the purpose of IPS education should be to equip students with balanced competence, namely: by developing intellectual ability (knowledge), developing personality skills as members of society and nation (attitude) and, developing social skills (skills). [2] The general purpose of social studies subjects at elementary level is for students to have basic logical and critical thinking skills, high curiosity, and know how to solve skills problem in social life, while the specific purpose of IPS learning in elementary school is to give to students knowledge of human experience in community life in the past, present and future to help students develop skills to seek and process information. [3] Observing the goals in the subjects of social studies is expected to lead students into human beings who are capable of making decisions, critical thinking and responsive to social problems that are very influential on human survival. The ability to think critically can help students make informed decisions based on careful, systematic, logical, and multifaceted efforts. Unlike students who only hear and write and memorize what the teacher explained and instructed during the classroom learning process.

The results of the research interviews as a preliminary study on April 2, 2017 with Anissa mothers grade V SDN Majalengka Kulon I Majalengka Majalengka District, on IPS learning, that the average grade of social studies subjects in class V in the odd semester for the academic year 2016/2017 only reached 65. While the value of KKM (Criteria Completion Minimum) IPS for class V is 70. The fact of low value of KKM (Criteria Completed Minimum) due to several causes of conventional learning model, students are less directly involved in the context of real learning, and the lack of teachers' creativity in teaching.

Therefore, students have difficulty in understanding IPS learning.

Based on the observations at SDN Majalengka Kulon I in the learning process of IPS students are less passionate in responding to the material presented by the teacher, the students are less flexible in expressing their opinions and the learning atmosphere is boring. And learning is only focused on the completion of the material contained in textbooks. When viewed from the learning objectives IPS students lack experience in exploring facts and drafting the concept, in addition to the lessons learned in the learning process and less hone the thought process to solve the social problems in depth.

The above conditions emphasize the importance of the role of IPS teachers in primary schools in improving the quality of IPS learning. Therefore, improvement efforts can be started from the learning process that is designed and implemented to create a quality learning system. Teachers are a key part of school progress and learning, because learning outcomes is a mirror of the learning process undertaken by teachers by optimizing all components of learning.

Effects that happen in class V SDN Majalengka Kulon I that teachers should be able to choose the appropriate model of learning in order to improve students' critical thinking skills in IPS subjects in accordance with subject matter and classroom conditions. Where the learning model is the way the teacher in presenting learning materials to achieve the expected goals.

Appropriate learning model to improve critical thinking ability, that is cooperative learning model. Due to cooperative learning model of group type. Cooperative model is a model that encourages cooperation among students to achieve goals. In individual cooperative activities look for the results they observe for all other group members. Cooperative learning is the instructional use of small groups that allow students to work together. [4] The Investigative Group learning model is learning for interconnected projects and is associated with assigning, analyzing,

synthesizing information with multi-problem solving efforts. [5] With the above theory along with the group learning model. That is in the process by the students themselves to create a system.

Step by step model study of group investigation according to Arends (Susanto, 2014: 237) that is: 1). Selection of topics, 2). Group learning, 3). Implementation, 4). Analysis and synthesis, 5). Presentation of the final product, 6). Evaluation. [6]

## B. METHOD

The research method used is action research method. This study aims to improve the learning process of social science khusnya to improve the ability to think critically through the material to be taught. Through cooperative learning model of group investigation type to make learning process more active and more meaningful that can develop process of student's thinking activity. The design of the action / cycle design chosen in this action research uses the Kemmis and McTaggart model that starts from planning, action, observation, reflecting.

Research procedure This action is done through several cycles. Adjusted to conditions and expected improvement results in previous cycles. each activity is divided into two cycles, each cycle consists of planning, action, observation and reflection.

Criteria of Success Action learning reaches 100% target (complete learning). The expected learning achievement based on achievement indicators (IPH  $\geq$  80%), students get the minimum completeness criteria (KKM) learning  $\geq$  70% to be achieved by students. So that learning outcomes can achieve improvement in accordance with learning objectives. Of all students are expected to achieve the value of KKM 70 and above.

Data collection techniques in this study comes from the interaction of researchers with students in the learning activity sheet of teachers and students, in the form of tests and non tests and documentation.

## C. RESULTS AND DISCUSSION

This research was conducted in november-December 2017. The research was conducted based on the cognitive results of students, the results of research have been done to improve students' critical thinking skills through cooperative learning model of group investigation type in grade V students SDN Majalengka Kulon I with material on theme 5 " Proud as Indonesian Nation ", subtema 1" Indonesia Nation Rich "there is a significant increase

Cognitive Sphere Improvement of critical thinking skills in the cognitive domain is done through the assessment of critical thinking skills that are implemented at the end of cycle I. Here is a comparison table of cognitive domain assessment results.

**Table 1**  
**Comparison of Learning Outcomes Cognitive Spheres Cycle I.**

Learning outcomes	Many students	Persentase
Completed	12	52,%
Not yet completed	11	47,%
amount	23	100 %

Based on the results of the IPS learning assessment in improving the critical thinking skills of grade 5 students of SDN Majalengka Kulon I, there are 23 students who underwent the first cycle test with details, there were six students (26.08%) who achieved 85-100 (A) , six students (26.08%) reaching the range of 70-

84 (rank B), seven students (30.43%) who achieved the range of 55-69 (rank C) and four students (17.39%) who achieved value less than 55 (rank D). when averaged then the whole students got an average score of 69.91.

This is what makes consideration for researchers to continue research into the

second cycle. The second cycle will be the follow-up of the reflection result in cycle I. The constraints, shortcomings and problems found in cycle I will be fixed in cycle II.

In the second cycle, the results illustrate that the critical thinking skills of the cognitive

domain students have been able to achieve the standard that has been provided even beyond it. Here is a comparison table to clarify the results of student learning on cycle II.

**Table 2**  
**Comparison of Critical Thinking Skills of Cognitive Area Students Cycle II**

Learning outcomes	Many students	Persentase
Completed	21	91,3%
Not yet completed	2	8,6%
amount	23	100 %

Based on the result of the IPS learning study in cycle II, it was found that there were seventeen students (73,91%) who achieved the score of 85-100 (rank A), four students (17.39%) who reached the range 70-84 (rank B), and two students (8.69%) reaching the range 55-69 (rank C) and no students scored less than 55 (rank D). if averaged equal to 88. Students' ability in cycle two has shown improvement over cycle I. In the learning process of critical thinking activities conducted by students much better. Students are able to analyze each topic of the problem acquired and students also have more confidence to convey his conclusions. Although not 100% of students are able, but the increase is happening to the positive.

Based on the results of research that has been done to improve students' critical

thinking skills through group investigation model in grade V students of SDN Majalengka Kulon I material on theme 5 "Proud as Indonesian Nation", subtema 1 "Indonesia Nation Rich" there is a significant increase.

Based on these aspects, researchers used cognitive aspects to measure students' critical thinking skills. on the cognitive aspect that is proved through the test results given at the end of the cycle.

Increased critical thinking skills in the cognitive domain is done through the assessment of students' critical thinking skills that are executed at the end of each cycle. Here's a comparison table of cognitive domain assessment results that show an increase. critical thinking ability from cycle I to cycle II.

**Comparison of achievement of minimum completeness criterion (KKM)**  
**of student cycle I and cycle II**

Learning outcomes	Many students	Persentase
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Not yet completed	2	8,6%
amount	23	100 %

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**Comparison of achievement of minimum completeness criterion (KKM) of student cycle I and cycle II**

Completeness	Siklus I	Siklus II	% Siklus I	% Siklus II
Completed	11	21	47,82%	91,30%
Unfinished	12	\2	52,17%	8,70%
amount	23	23	100%	100%

This is evidenced by students' increasing critical thinking skills compared to previous cycles. Almost all students have attained KKM, there are only two students who are still unfinished. Comparison of improvement of students' critical thinking ability in cycle I and cycle II can be seen graph below. Here is a graph of improving students' critical thinking skills.

#### **Graph of Progress Critical Thinking Ability of Each Cycle**

There are six indicators that become the assessment of critical thinking ability that is formulating the problem, giving arguments, deduction, induction, evaluation, and making decisions and actions. The result on each indicator of critical thinking ability of cycle I showed that formulate problem get percentage equal to 65,20% with enough criteria, give argument get percentage equal to 71,10%, deduction get percentage equal to 64,60%, induction get percentage equal to 64,10%, evaluate get percentage equal to 70,60% and

last take decision and action get percentage equal to 67,90%. Then the average student score of 67.26. It shows the students' critical thinking ability is still below the minimum mastery criteria.

In the second cycle the result of critical thinking ability on the indicators formulate the problem of obtaining a percentage of 81.50% with good criteria, giving the argument to obtain percentage of 83.60%, deducted to get percentage of 76%, induction get percentage of 77.10% evaluate to get percentage of 80,40% and last take decision and action to get percentage equal to 84,20%. This shows that students' critical thinking skills are increasing in cycle II.

#### **D. CONCLUSIONS**

The application of cooperative learning model of group investigation type to improve students' critical thinking ability in social studies subjects in grade V students is as follows.



There is an increase in students' critical thinking ability by using cooperative learning model of group investigation type in grade V students of SDN Majalengka Kulon I. Seen from the learning process using GI model which lasted for two cycles. In theme 5 "Proud As Indonesia Bangsa", with subtema 1 "Indonesia Nation Rich". The use of GI type cooperative learning model can improve critical thinking ability because in the learning process there are steps as follows.

First group learning, each student is divided into five groups with heterogeneous group members. The division of groups is intended to enable students to be active in the learning process. Both the topic selection, the teacher conducts the selection of topics in a way *direndom*, the teacher instructs each group leader to choose the topic that has been provided. The third implementation, at this stage the teacher instructs the students to search for various sources of information related to the selected topics, this activity students are not only fixated on one source only, but more involving students looking for other resources so that all students in the group become active.

Fourth analysis and synthesis, in the topic of learning distributed to each member of the group, in which there is a problem to be solved by students through analysis and synthesis, students began to analyze with various sources found. In this activity each student in the group is actively involved, not just one student who does the analysis but all the students in the group, through this analysis process can improve students' critical thinking ability. and finally the final presentation of the product. Each group made a presentation of the results of the analysis and synthesis conducted by the group.

The result of critical thinking ability test done in this research shows that the improvement of critical thinking ability which is seen from the result of the average value of cycle II increases from the first cycle that is the average value of 63,6 and the student's success rate is 51,4%. While on the second cycle students get an average score of 76.5 with student success rate of 91.4%. Thus this research is said to be successful because the GI

model can improve students' critical thinking skills.

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